

SMI **CSRM**

Centre for Social
Responsibility in Mining

Narrabri Gas Project Social Impact Assessment

Expert Review and Independent
Advice to the New South Wales
Department of Planning and
Environment

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The Centre for Social Responsibility in Mining (CSR) is a leading research centre, committed to improving the social performance of the resources industry globally.

We are part of the Sustainable Minerals Institute (SMI) at the University of Queensland, one of Australia's premier universities. SMI has a long track record of working to understand and apply the principles of sustainable development within the global resources industry.

At CSR, our focus is on the social, economic and political challenges that occur when change is brought about by resource extraction and development. We work with companies, communities and governments in mining regions all over the world to improve social performance and deliver better outcomes for companies and communities. Since 2001, we have contributed to industry change through our independent research, teaching and commissioned research services.

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Key publications:

Owen, John R., and Kemp, Deanna (2017) *Extractive relations: Countervailing power and the global mining industry*, Greenleaf Publications: Sheffield.

Owen, John R. and Kemp, Deanna (2013) Social licence and mining: a critical perspective. *Resources Policy*, 38(1): 29-35.

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Abbreviations

CCC	Community Consultative Committee
CSRМ	Centre for Social Responsibility in Mining
DIDO	Drive-in drive-out (long distance commuting by car)
DPE	Department of Planning and Environment
EIS/EIA	Environmental Impact Statement/ Environmental Impact Assessment
FIFO	Fly-in fly-out (long distance commuting by plane)
FTE	Full time equivalent
GCBF	Gas Community Benefit Fund
GISERA	Gas Industry Social and Environmental Research Alliance
KPI	Key Performance Indicator
NGP	Narrabri Gas Project
RtCSRМ	Proponent's Response to CSRМ
RtS	Proponent's Response to Submissions
SEARs	Secretary's Environmental Assessment Requirements
SIA	Social Impact Assessment
SIMP	Social Impact Management Plan

1. Introduction

In May 2017, the New South Wales (NSW) Department of Planning and Environment (DPE) invited Professor Deanna Kemp, Director of the Centre for Social Responsibility in Mining (CSRMI), part of the Sustainable Minerals Institute (SMI) at The University of Queensland, to provide: (i) expert review of the social impact assessment (SIA) components of the environmental impact assessment (EIA) relating to the proposed Narrabri Gas Project (NGP), and (ii) independent advice and recommendations to the DPE relating to the above. The advice focusses on the local and regional social impacts of the project.

In accordance with the scope of work provided by the DPE, this report offers a review of the SIA documentation prepared by the proponent, Santos Ltd, including relevant sections of the *Narrabri Gas Project Environmental Impact Statement (EIS)* and *Appendix T1 Social Impact Assessment (SIA)*, prepared by GHD Consultants and the *Narrabri Gas Project Response to submissions* by Santos Ltd (RtS), including the supplemented project commitments (Appendix B). The SIA for the NGP contemplates the Narrabri gas field and associated infrastructure, including: a gas processing facility; produced water gathering and irrigation systems; and ancillary works, such as expansion of the Westport worker's accommodation facility and highway intersection upgrades.

This review offers three inputs into the DPE's Assessment Report for the NGP. First, it comments on the extent to which the SIA component of the EIS demonstrates inclusivity, materiality and responsiveness (AccountAbility 2015). Second, it highlights areas where the information provided in the SIA component of the EIS, and the proponent's subsequent responses, are inadequate for assessing potential social impacts of the proposed project, or where the proposed mitigation of potential impacts need strengthening. Third, it proposes ways to manage identified risks through: (i) strengthening the Social Impact Management Plan (SIMP) that the proponent has committed to develop, and (ii) regulatory measures (notably licence conditions).

The review highlights the limitations to making informed judgements about social impact on the basis of the information provided by the proponent. However, on available evidence, and given the nature and scope of the NGP as outlined in the submission, the review concludes that the social risks and impacts posed by the NGP can be adaptively managed, with specific conditions. This will require a shared responsibility for transparent monitoring by the company and the regulator, and a proactive and well-resourced approach to social impact management by the company.

The advice is based on a desktop review of documentation, and is not based on direct consultation by the expert with council representatives, landowners, or local community and stakeholder groups affected by the NGP. Relevant statutory and industry guidelines and standards, including SIA principles used in the DPE's Social Impact Assessment Guidelines (released seven months after the proponent's EIS was submitted) were considered. While

these guidelines were considered, the advice is based on requirements at the time Santos submitted the EIS documentation.

Other sources informing this advice are listed in Section 5 and include the following:

- The proponent's response to CSRSM's questions (RtCSRSM) in relation to the NGP of 24 April 2018.
- Consultation with relevant NSW Government personnel, in particular the DPE's SIA specialist, Dr Richard Parsons, the proponent and its experts as co-ordinated through the Department.
- Media reports, including the SBS Insight program (29/5/2018).
- Relevant secondary sources including reports by third parties such as the CSIRO (Walton et al. 2017).
- Santos's response to issues raised in 18,245 submissions received during the public exhibition period in mid-2017 (RtS 2018), with a focus on unique submissions commenting on social and health impacts (2162 submissions), as well as those commenting on visual and landscape matters, and community consequences of environmental impacts.
- A more detailed review of 20 submissions that were selected as key reference points on the basis of the range of issues covered, including submissions from government agencies, councils, environmental, farming, Aboriginal and business groups.
- The proponent's commitments including the commitment added following the submission of original EIS – to develop and implement a SIMP.

Professor Kemp was assisted in the preparation of this report by Dr Jo-Anne Everingham, Senior Research Fellow, Dr Ceit Wilson, Research Analyst, and Julia Keenan, Research Fellow, at the Centre for Social Responsibility in Mining (CSRSM), part of the Sustainable Minerals Institute (SMI) at The University of Queensland (UQ).

2. General observations

This section provides general observations about the potential social impacts identified by the proposed NGP, and comments on the adequacy of the methodology and evidence base for the analysis and management of these impacts, as outlined by the proponent.

2.1 The project – as described by the proponent in the EIS, RtS and related materials, as well as the assurances given therein – will provide benefits for some local and regional people that can be enhanced with attention. A small number of people will experience short or longer term negative impacts. Should the project be approved, proactive mitigation and transparent monitoring will be essential to ensuring these impacts remain within predicted limits. Achieving a balance between benefit to society and negative impacts on individuals is a challenge for the project (though not unusual for complex resource extraction projects). Section 3.8 observes the extent to which those people who will be affected will have an

opportunity to participate in the process, and Section 3.6 observes the extent to which disproportionate distribution of impacts will be mitigated.

2.2 The proponent's assessment is that, with implementation of the controls and management measures outlined in the EIS, the 'residual risk from potential health and wellbeing [impacts] was assessed as low' (EIS, p. 26-1). The RtS reiterated that 'when balanced against its demonstrable social and economic benefits, it is considered that the project would be consistent with the principles of intergenerational equity' (RtS, p. 6-281). It will be critical to public trust in the proponent and in the NSW Government that the documents supplied through the assessment process prove to be a reliable and credible account and assessment. For instance, the predicted scale of the project is 'up to 850 new gas wells on up to 425 new well pads with associated gas processing and water management facilities and ancillary infrastructure' over 20 – 25 years. This implies an upper limit that will not be exceeded. Local community acceptance of the project would significantly change if there were to be hydraulic fracturing stimulation ('fracking') of wells. The proponent has stated that they do not anticipate needing to use fracking technology and that they are not seeking approval for such an activity in this application. These are important undertakings, easily monitored in the future.

Risk assessments are more complex and involve (informed) judgements and consideration of expert data and social values. It is not clear that risks to community from the project have been accurately characterised in a way that is informative and credible for potentially affected people. There is limited transparency for the basis of several of the proponent's claims about impact significance, likelihood and consequences, and the assumptions that underpin some of the proponent's assessments. Thresholds of likelihood and consequence calculations should be transparently stated in the SIMP, and in the development of social performance indicators. While some of the most significant potential impacts are realistically assessed as low likelihood, their potential consequence were also assessed as low – perhaps because the number of affected people is small (although this is not made clear in the documentation). Measures other than number of people affected are relevant in determining the consequence of social impacts. For instance, the extent and distribution of impacts; the sensitivity, vulnerability and attachment of those affected; the duration and timing of impacts; and their severity in terms of reversibility and psychological stress are all relevant considerations. Section 3.10 deals with the issue of information transparency.

2.3 Assessment of this application is confounded by the fact that – in accordance with NSW planning system protocols – the current proposal relates to a single project. The application does not relate to the associated pipeline that is to be constructed and operated by a separate company (APA Group) and will receive separate consideration. A key argument for the value of the NGP is the contribution it will make to the gas needs of NSW. This is dependent on the ability to transport the gas to domestic or export markets. The proposed mechanism is through a currently non-existent pipeline connecting to the *in situ* Moomba-

to-Sydney pipeline, which does not form part of the current submission. This represents a limitation of making an informed assessment of the impacts of the NGP project.

Likewise, it is inevitable that many details of the project are not planned at this stage and will not be planned until after the project is approved. Such details include a protocol for determining when wells will be decommissioned and procedures that will be used by sub-contractors and exact locations of wells and other infrastructure or transport routes to be utilised. The separation of the pipeline project, and the absence of detail at the approvals stage, mean that the regulator's determination is made on the basis of incomplete information and conditions. It is therefore inevitable that the regulator's response may not address some areas that later emerge as relevant and are of consequence to the community. Some of these issues are canvassed in Section 3.10.

2.4 Ongoing collection of demographic and well-being information and data will be needed to ensure the adequacy of preliminary predictions and responses to social impacts within the region, and to ensure measures are in place to monitor, manage, and, if required, mitigate unforeseen impacts. The framework of the proposed SIMP is elaborated in the RtCSR (p. 14-15). Elsewhere the proponent specifies that the SIMP will be guided by the *Social impact assessment guideline for State significant mining, petroleum and extractive industry development* (2017) and that it will provide for monitoring and management of social impacts for the life of the project (RtS, p. 6-232). Appropriate monitoring will be essential to satisfactorily understand and manage uncertainties. This matter is addressed in Section 3.9.

The social baseline material collected as part of the EIS (Chapter 26), especially as supplemented by Gas Industry Social and Environmental Research Alliance (GISERA) (Walton et al. 2017; 2018) provides a valuable starting point for impact monitoring. As the proponent noted, some of the baseline information was outdated since it was based largely on the 2011 Census data. The GISERA research utilised more recent and more comprehensive data, as the RtS notes. The GISERA reports demonstrate the value of an independent, locality-wide baseline study that provides a reference point for understanding the impacts of a single project.

The GISERA research also demonstrates that the proponent's commitment to facilitating three-yearly comprehensive third-party environmental audits of the environmental management plan, in addition to statutory annual reporting of compliance with licence and lease conditions (RtCSR, p. 16), could apply to the SIMP as an equivalent type of 'management plan'. This is consistent with the NSW Government's expectation that authorities consider impacts on the social, natural and economic environments when assessing the merits of a development proposal.

2.5 Varying levels of detail were provided on issues, impacts and planned activities and in response to questions posed by the expert reviewer, and other submissions. While this is

not an issue in and of itself, there is a certain incommensurability in the detail provided, relative to some of the issues at hand, without the proponent indicating why this is the case. For example, there is considerable specification of what can be expected in the Bushfire Management Plan, including who will be involved in its preparation and the issues it will cover. Many other plans are proposed including a Closure Plan, Cultural Heritage Management Plan, Historic Heritage Management Plan, Traffic Management Plan, Community Engagement Plan as well as many Environmental Management sub-plans for matters that are of social consequence such as Air, Water and Noise. Not all of these plans provide a commensurate level of detail of matters such as who will be involved in the planning process, the monitoring arrangements, and key performance indicators (KPIs).

Moreover, in committing to developing numerous management plans, the EIS does not indicate that consultation with stakeholders will be included in the plan development process. The proponent usually nominates one 'key stakeholder'. The plans also lack detail about variation in impacts across the life of the project (during construction, operation and decommissioning). This variation is recognised in residual risk calculations. However, it is not clear that the various plans attend to all these phases of the project's proposed life. Social impacts are known to vary with industry cycles, and so it will be important to track change over time. For instance, population-related impacts are often most significant during periods of peak construction.

2.6 Repetition increases the length of EIS documentation without necessarily adding value. This is evident in both the initial EIS and the RtS. For example, in the RtS, section 6.9 deals with submissions about community engagement and consultation. The first half of the proponent's response to submissions about effectiveness of stakeholder consultation processes (RtS, p. 6-55) and about the allegedly 'narrow definition' of stakeholders (RtS, p. 6-53) is identical and reiterates a summary of Appendix D of the EIS listing consultation activities. A cross reference would have sufficed. Ideally, the almost 500 page RtS would present material to supplement that provided in the original EIS. In a large number of cases, the RtS confirms or reiterates material previously supplied. There are 34 pages of response to social and health matters and it is observed that, though some extra studies were conducted, and hence new information presented about environmental issues raised in submissions, key social issues raised in submissions did not prompt additional studies.

Likewise, there appear to be more than 100 commitments (EIS Chapter 31), but some of these are repetitions (on two or more occasions) – e.g. implementing complaints management procedure is listed as both a mitigation management undertaking (1.3) and a social and health commitment (17.3). This repetition does suggest an appreciation of the interconnection of issues and the possibility of addressing a number of issues with one well-designed initiative. It is not responsive to concerns about the length of EISs and access to information for non-specialists. Nor is the recognition of interconnections as evident in other respects. For example, water is treated as a technical and environmental issue and

community consequences, stress and values are not addressed when this is evidently a material issue to affected communities. Further, health impacts and impact on sense of place are addressed in limited and specific senses, rather than acknowledging their links to broader social issues.

3. Specific impact areas

The expert's preliminary review identified 10 areas of social impact as having gaps or imprecision in the data/information presented in the SIA that limited the review of potential social impacts of the proposed project and rendered the characterisation of risk incomplete. These are areas commonly impacted by resource extractive projects, generally aligned with social and health concerns raised in public submissions (see Appendix 1), and they are known to be among the areas of concern in the project area (SBS Insight June 2018; Walton et al. 2017).

This report provides commentary on the predicted social impacts and management proposals including any revised or additional information or management measures related to those 10 areas of impact, which are:

1. local economic development and livelihood impacts
2. community development
3. local housing
4. local medical services, community health and safety
5. local mental health services
6. inclusiveness and diversity
7. conflict and community cohesion
8. ongoing community engagement
9. social impact monitoring
10. information transparency.

In addition to general observations about predictions related to each of the impact areas, this report comments on the data/information and mitigation/management proposals contained within the SIA, and supplementary response material provided by the proponent. Thus, this report evaluates the SIA and proposals for management of the most material and likely social impacts of the proposed project. It also presents a series of recommendations for consideration. Should the project be approved, these recommendations provide guidance about the ongoing adaptive management of social impacts. The recommendations are presented in Section 4 under four headings.

This report recognises that the proponent is conscientious about meeting regulatory requirements. Therefore, a key opportunity for ensuring satisfactory social performance and management of social impacts should the project be approved, lies in the statutory requirements for companies, and in licence conditions. Imprecise commitments such as "commensurate with the nature and scale of activities", or "this will be considered" will be

challenging to monitor and enforce. Such qualifiers are subject to a range of interpretations and different performance standards. Likewise, any conditions set by the regulator should provide clear definitions and avoid terminology such as “but not limited to” since that does not indicate what is in scope.

3.1 Local economic growth and regional development

The proponent predicts that the proposed project will create 1,300 jobs during peak construction and 200 during operation (150 working on site) with an average of 512 full time equivalent (FTE) direct and indirect jobs created in the whole of NSW over the life of the project. Of these workers some are predicted to reside in Narrabri (105 during peak construction and 90+ during operations). The proponent also predicts additional local business opportunities, and has elaborated how these align with, or support, the local and regional aspirations for economic development (RtCSR, p. 2-3). Further, the proponent provides details of some of the measures proposed to improve local industry participation, capability and competitiveness such as contractor and supplier forums. Suitably timed and targeted, such measures can benefit local business (Esteves et al. 2010).

The assessment of cumulative effects on labour of the NGP with other industries and other resource projects in the region suggests that the three to four year construction phase may be the only period of strain on the local labour market which otherwise will likely accommodate combined demands. The NGP EIS and Appendix T1 engage with the specific impacts on selected regional industries – notably tourism, agriculture and the Siding Spring Observatory. In livelihood terms, agricultural landholders are acknowledged as likely to experience impacts with specific commitments to address those in consultation with affected landholders (e.g. 8.1 Land Access Agreements and Farm Management Plans). However, the footprint of a coal seam gas (CSG) project means considerable uncertainty remains for other agriculturalists without gas production infrastructure on their property and with potential to be affected by project activities. The sector deemed likely to experience strongest competition for labour is the mining sector.

The EIS predicts rising labour costs with the mixed effects that upward pressure on wages bring. High wages are positive for the workers concerned but present challenges for other sectors of the economy. The assessment of cumulative impacts is difficult since the likelihood of other projects proceeding and the timing of even approved projects or potential changes with respect to current operations is usually beyond a single proponent’s knowledge. A commitment to utilise suitable indicators to track the realisation of predictions, and to detect any developments and associated potential for cumulative impacts, is desirable.

Comments and recommendations

- 1) The proponent’s procurement and logistics strategy (commitment 18.1) and SIMP (commitment 17.8) should include proactive measures to enhance local economic development in line with local and regional aspirations by partnerships with local

councils, Chambers of Commerce etc. This could be added to the responsibilities of the locally employed procurement and contracts officer (see Section 7.2 of Appendix T1).

- 2) The proponent should consult and negotiate with local economic development agents and other sectors to mitigate the effect of the competition over skilled labour that is predicted during the three years of project construction. This would facilitate joint strategies about suitable forms of advance notice of labour, skills and supply needs to both 'alert' local businesses to potential opportunities and 'warn' them of potential threats to their own inputs.
- 3) Commitment 17.2 to an Aboriginal Engagement Strategy, to maximise Aboriginal economic participation in project-related employment and contracts, is welcome. The related capacity building strategies and employment, training and procurement initiatives outlined in Appendix A of the SIA should include KPIs and monitoring plans. This will also be relevant to any commitments to employment, training and business development in the agreement with the Gomeroi native title claimants. The commitment implies a supplement to the Diversity and Equal Opportunity policy (Appendix A of Appendix T1), which does not specify capacity building strategies as part of employment, training and procurement initiatives targeted at Indigenous peoples.
- 4) The Gas Community Benefit Fund (GCBF) would benefit from consideration of strategic investments to build the diversity and resilience of regional economies since resource projects inevitably have a finite life. This could be proposed as a selection criterion of GCBF projects.
- 5) Proposals to monitor impacts on other industries should include indicators of cumulative impacts on resources of common interest (e.g. water, land, air, labour) and should monitor potential 'spill over' impacts on neighbouring properties, not only host properties.

3.2 Community development

The proponent claims that there will be benefits and development associated with the project – economic and otherwise. The proponent predicts that these economic benefits will contribute to achieving local aspirations expressed in identified plans and strategies (RtCSR, p. 2-3). Realisation of such plans is outlined as requiring cooperation with others:

The proponent will work with government, industry representative bodies and communities to improve local industry participation, capability and competitiveness (RtCSR, p. 11).

This is consistent with contemporary practice of mining companies partnering with local government agencies and other local organisations in community development activities (ICMM 2015; Kemp 2009). Many references are made across the suite of documentation to areas for which others are responsible (e.g. councils and Forestry Corporation of NSW for roads, and infrastructure; service providers for local health, education and recreational facilities; Federal and State government programs for education fee supplements; and TAFE

for training programs). There are general assurances such as that the proponent will contribute to “building new skills and offering apprenticeship programs” (RtCSR, p. 12). No specific strategy for working with responsible authorities is detailed. There is a sense that many of the benefits that the proponent predicts will flow from the project are anticipated to be provided by government agencies, in response to regional growth. Such beneficial ripple effects should be presented as indirect effects of the project.

The other avenue that the proponent elaborates as a mechanism for community development and improved community and social infrastructure and services is a GCBF to which the NGP commits to contribute (Commitments 17.6 & 18.2). The proponent estimates total contributions of \$120 million across the 20 to 25 year life of the project in accordance with the NSW Gas Plan. The RtS elaborates the governance arrangements as per the GCBF Funding Guidelines (NSW Government 2017) indicating that the fund will be administered by the NSW Rural Assistance Authority, and thus at arms-length from the company, with the five to six member Community Benefit Fund Committee making decisions about which projects to fund. One member of the committee will represent the gas titleholder. Funding criteria and any measures to avoid dependency, and align with local area community development aspirations will presumably be the responsibility of the Committee and the NSW Government Rural Assistance Authority (as Fund Administrator). The GCBF will meet certain transparency requirements and will fund individuals, organisations or enterprises delivering local community development initiatives in a range of specified areas.

The proponent has high aspirations that this fund will produce economic growth, regional development and contribute to well-being in a range of areas (health, education, environment, economic development, heritage, sport, arts and culture). Disbursement of funds from the GCBF for the purposes of initiative implementation will be reported annually as part of monitoring the social benefits of the initiatives (RtCSR, p. 15). Without project selection criteria being available, it is not evident that long-term sustainable development will be a consequence of the projects supported by the GCBF. In addition, the EIS and SIA assume that the projects supported by the GCBF will mitigate impacts on social infrastructure and contribute to community cohesion. Design and implementation of GCBF projects will be dependent on the capacity of applicant individuals and organisations. Institutional capacity building for eligible organisations is not a stated priority.

The timing of funding – both long term improvements in well-being and impact mitigation through this avenue – is problematic. The explanation of how contributions are calculated suggests the distribution of the funds across the 20 to 25 year life of the project will be highest when production (and hence the royalties central to the calculations) are highest. As a result limited funds are likely to be available during one of the periods of greatest impact; that is, in the pre-production and construction phases. Company, governments and service providers often struggle to have infrastructure, services and facilities in place in time to mitigate impacts before royalties and other income streams are flowing.

The NGP documents refer to other benefits, community support and community investment stemming from the project. Benefits and “enduring value” can result from judicious community investments by an extractive company during the operations (DOIIS 2017). Such investments must be in addition to mitigating negative impacts of the company’s activities, though they could include enhancement of opportunities. The EIS and associated documents do not clearly distinguish between the proponent’s commitment to impact mitigation, community investment, and the GCBF. Nor do they specify the different ways they might work with stakeholders in these endeavours (Esteves 2008).

Comments and recommendations

- 6) Conditions could require the proponent to work with the NSW Government to support workshops, forums and information sessions about the GCBF to develop capacity of potential applicants in grant-writing, needs analysis, program evaluation and other relevant skills.
- 7) Government should negotiate with the proponent about establishing a ‘seed’ fund so some resources are available for mitigating and managing construction phase impacts before the GCBF has resources. There should also be discussions about potential for the fund to become self-supporting beyond the flow of royalties from the NGP.
- 8) Future plans and reporting should distinguish between impact mitigation, benefits streams and community investment, and provide details of associated consultation, partnerships and cooperation.

3.3 Housing

The NGP EIS states that an impact on housing and accommodation availability and affordability during the construction phase is “possible” and during the operational phase, “almost certain” (EIS, p. 26-24). The proponent’s undertaking is to significantly mitigate the impact of the construction workforce by expanding the Westport accommodation facility. This, in combination with existing Civeo accommodation facilities in Narrabri and Boggabri is anticipated to suffice for 90 percent of the peak construction workforce (EIS section 4.4.6 and Appendix T1 Section 7.7). The EIS also mentions, without providing details of content, that a workforce accommodation strategy was developed in consultation with the shire council and local police. Without access to further information, one must assume that this strategy relates primarily to the proportion of the workforce that will be long distance commuters (e.g. FIFO) – more than 70% for construction workers and 5% of operational staff (EIS Appendix T1, p. 48-51).

Data used to inform the housing and accommodation baseline was based on 2011 information and is presented in Section 4.4.6 and Section 6.3.6 of the EIS Appendix T1. This has been supplemented by a more recent assessment of Narrabri housing stock that shows an additional 587 houses and 736 unoccupied dwellings with 341 properties for sale (RtS, p. 6-231). However, there has been no improvement in vacancy rates for temporary and rental accommodation (RtS, p. 5-146), which might be more relevant to low and fixed income

residents since 30 percent of residents (and 61 percent of the Indigenous population) are renting.

The original SIA reported low availability of rental and temporary accommodation and an identified need for affordable housing, which is presumably still the case (EIS Appendix T1, p. 41). It also noted that the population and workforce of Narrabri is changing slowly. This led to the conclusion in the EIS (and reiterated in the RtCSR) that the local market will be capable of absorbing the in-migration of the additional 50 operational workers and their families to the area anticipated for the operational phase, and the population increase of ancillary service industries workers and their families.

The proponent deems that calculating the contribution of any but their direct employees is beyond the scope of the SIA (RtCSR, p. 6). This assumption appears to overlook the multiple established pathways of impacts on housing and other social indicators such as employment (Ennis et al. 2013). Three pathways are relevant: (i) direct demand from the proponents own employees; (ii) indirect demand associated with the proponent's need for goods and services for its business coming from those employed by suppliers and contractors; and (iii) demand generated by direct and indirect employees themselves. Hence, an extra school teacher is not a direct or indirect result of the project but may result if the proponent or its contractors attracts new residents by employing workers with school-age children in their family. Ignoring the demand for accommodation and services from this segment of the population of a resource town risks underestimating social impacts, since many "essential service workers" struggle in the inflated housing markets that accompany resource development (Haslam-Mackenzie et al. 2009; UQ Boomtown Indicators 2015).

Absent from the EIS was any prediction of the potential for cumulative impacts on the housing market within the likely timeframe of the project given other industries and projects. This may reflect realistic estimates of relevant stakeholders including local council and regional planners, but that is not clear. Nevertheless, there is a commitment to transparent monitoring of regional housing conditions and availability of private camp accommodation and to flexible management of accommodation as a result (EIS Appendix T1, p. 91). Monitoring of local housing conditions should detect any unanticipated stresses that emerge, particularly in the rapid ramp up predicted immediately post-approval (and final investment decision), and trigger mitigation measures.

There is a proposed "construction workforce housing and accommodation strategy" but details are scant and it is not evident that it includes measures to protect vulnerable residents or those at risk of housing stress. The proponent indicated in its RtCSR that monitoring activities could be extended to include workforce housing and accommodation demand from businesses providing goods and services to the project. Extended monitoring is desirable to check assumptions about low impacts on residents at risk of housing stress:

[...] it is unlikely that housing demand from 50 workers would affect the housing needs of vulnerable groups. In addition, project workers seeking rental accommodation would likely be competing for a different market sector than the vulnerable groups referred to in the question thereby further lowering the likelihood of conflicting demand (RTS, p. 5-146).

The conclusion of low likelihood of impact on vulnerable groups ignores the well-established phenomenon of housing stress for Aboriginal peoples, and people such as critical service industry workers or those on low and/or fixed incomes in the housing markets of resource towns. This stress is attributed to the inflation of wages and housing costs drives prices beyond their reach (UQ Boomtown Indicators 2015). In rural town real estate markets, landlords and vendors may not distinguish their property as being a “different market sector” and accept two-tier pricing. Welfare groups, social housing providers and Aboriginal housing associations could participate in the monitoring.

Comments and recommendations

- 9) For the SIMP, the housing baseline should be supplemented with categories of housing available so the potential impact on various population segments can be more realistically assessed and tracked over time.
- 10) Monitoring of housing impacts should focus on changes in the receiving environment and impacts for different segments of the population. This will require the monitoring of more than just the effect of NGP direct employees. Responsibility for monitoring should be a shared responsibility between the proponent and the NSW Government. Participation of local housing agencies such as Aboriginal housing associations will assist in monitoring impacts on vulnerable sections of the population.

3.4 Medical services

The NGP EIS states (Chapter 26, p. 14) that “significant population increases may place additional demand on health and emergency social infrastructure”. The population increase predicted by the proponent in the SIA is not regarded as significant (130 people, equal to 50 extra families of direct employees during operations). The EIS also states that the much more substantial non-resident workforce for construction would address their regular health needs at their place of permanent residence and so not place demands on local services (Chapter 26, p. 14). In its RtCSRMs the proponent supports their original statement by outlining their work fitness requirements. In light of findings of previous studies including the parliamentary inquiry into long distance commuting (FIFO and DIDO) workforce practices in Australia (HoRSCoRA 2013), it is likely that non-resident workers may need to use local health services while on roster. Engagement with service providers through various forums is proposed to monitor changes in demand for services as a result of the project.

Monitoring to alert the proponent to any requirement for mitigation is important. The indication that the GCBF will mitigate impacts on community facilities and infrastructure (EIS

Appendix T1, Table 25) is another example of insufficient distinction between mitigating impacts and providing benefits.

Comments and recommendations

- 11) The SIMP should include monitoring of whether non-resident workers address their regular health needs in their place of permanent residence or place added demands on local services.
- 12) The proponent's occupational health and safety measures will need to comprehensively attend to the health and well-being of its workers and contractors' workers while on site.
- 13) The SIMP should specify engagement with service providers to assess and monitor the impact of non-resident workers on medical, health and well-being services and establish KPIs and thresholds/trigger points for response. In resource regions, such collaboration and monitoring is critical to improving planning at both the local and state level to support regional health delivery.

3.5 Mental health services

The treatment of mental health is a serious challenge in rural communities, with suicide rates substantially higher than the national average (Australian Bureau of Statistics 2011). Peer-reviewed studies argue that, in addition to an elevated level of risk, concerns specific to CSG may further increase the stress burden on landholders and other rural people (Haswell et al. 2016; Lai et al. 2017; Morgan et al. 2016). CSG workers too are at risk. The effects of FIFO/DIDO arrangements and extended working hours on the stress, lifestyle, relationships and health characteristics of extractive industry employees and their partners has been raised as a national concern (HoRSCoRA 2013). The proponent expresses an intention (though not in a project commitment) to develop and implement an employee assistance program (RtCSR, p. 12). This undertaking is appropriate and it will be important for this assistance to be available to all FIFO workers in the event that some of the commuting construction workforce are contractors rather than direct employees.

There is little acknowledgement within the NGP SIA of the potential impacts of the project on the mental health of the community in which the project is located. Figure 26-2 of the NGP EIS identifies that stress and anxiety, "caused by a wide range of aspects of the project", have the potential to impact the wider community. A study in the Queensland gasfields that found modest levels of perceived community resilience noted the conditions for this:

[...] when participants perceive there to be good intergroup working relationships, good planning and leadership, continuing volunteer support, and access to relevant information, people feel a higher level of satisfaction with the way the community is responding to the changes (Walton et al. 2014, p. 19).

That study suggested almost half of the participants (48.5%) felt that the community was either resisting, not coping, or only just coping with the changes associated with the CSG industry (Walton et al. 2014, p. 22).

The EIS chapter 26 notes that community health impacts would be avoided, mitigated and/or managed through consultation with affected landholders, while a range of other strategies and initiatives would be implemented to minimise negative social and health impacts on other groups. What these strategies and initiatives will involve is not made explicit in Appendix T1 nor in the RtS. The RtCSRSM indicates the reason for this is that the Secretary's Environmental Assessment Requirements (SEARs) does not specify that health risk assessment address mental health and emotional impacts. The RtCSRSM rectifies the limitation somewhat by acknowledging the uncertainties that may cause stress and anxiety for stakeholders and providing a list of mental health support services available in the LGA. It is appropriate for the proponent to mitigate physical and mental health-related impacts that are found to be induced by the project. The proponent should also support efforts by the state and service providers to address issues in the wider community.

Comments and recommendations

- 14) Baseline and monitoring indicators should be supplemented to identify and track groups who are most at risk of adverse mental health consequences. Landholders are legitimately identified but others may be at risk as well.
- 15) The proponent and state should collaborate to monitor demands on identified mental health and well-being support services and cooperate with service providers bearing extra case-loads to devise measures to support the mental health and well-being of various parties so there is not exclusive reliance on available support services.

3.6 Inclusiveness and diversity

The NGP EIS does not consider the (potentially unequal) impacts of the project on different groups within the community in any detail. Identified as a common limitation in SIAs (Agrawal & Gibson 1999), the proponent considers diverse stakeholders largely as a homogenous group. According to the proponent, baseline data and social impact data are not disaggregated in the absence of specific directions in the SEARs, reinforcing a misconception that benefits and impacts are evenly spread across a community. As a result, the differential impacts on vulnerable people, or those with greater exposure to project-related risks, are largely unacknowledged and there is an assumption of net positive benefit. This is somewhat rectified in the RtS where the potential for different groups, localities, families or individuals to experience different impacts was acknowledged (RtS, p. 5-145).

The proposal does not identify groups of people who will be disproportionately affected, especially those who will at the same time potentially miss out on benefits. Landholders are identified as a group likely to experience distinct impacts arising from the project. Aboriginal people are acknowledged as likely to experience cultural and social impacts resulting in an

expressed intention to conduct further studies (e.g. ethnobotanical mapping). There is a proposal to make special provisions for Aboriginal people to participate in employment benefits. Other issues are discussed in the documents without exploring the potential uneven distribution of impacts and benefits. Examples are provided below:

Table 1: Issues discussed without fully addressing distribution of impacts and benefits

Issue	How discussed	Aspects overlooked
Negative impacts on housing	Impact on tourism and trade	Potential disproportionate impacts on segments of the population such as people on low incomes, single-parent families, Indigenous peoples, and the elderly.
Employment opportunities associated with the project	Averages of FTE direct and indirect jobs to be created locally, regionally and across NSW. Potential for skill requirements to preclude many local people from accessing employment opportunities	Segments of the population most likely to benefit from these opportunities. The levels of position different population groups might aspire to. The segments of the workforce who will be less likely to benefit given specific skill requirements – such as women.
Workforce diversity	Aboriginal engagement strategy	Other aspects of diversity. Functions that an Aboriginal engagement strategy might serve beyond employment.

Overall, the SIA is limited in its engagement with issues of vulnerability, gender and Indigenous peoples. In fact, the proponent states that gender disaggregation of data was not undertaken since the gender issues were not raised in consultation, and that this follows SIA convention (RtCSR, p. 10). As a consequence, the identification of measures to mitigate risks to specific demographic groups, and support equitable access to opportunities that may arise from the project, is limited.

The RtS does acknowledge “The potential for inequality in the socio-economic benefits or impacts [...] including the distribution of employment and income or potential impacts on social infrastructure, housing and accommodation on particular groups or individuals” (RtS, p. 6-236). Three mechanisms are cited as addressing this: (i) company sponsorship and donations; (ii) a diversity and equal opportunity policy; and (iii) the GCBF (in the absence of project selection criteria and with no apparent targeting of disadvantaged groups). Company sponsorships and donations for community organisations and events are often appreciated, and an established form of community support. However, these do not necessarily serve long-term strategic development purposes (Esteves, 2008).

The proponent claims that the Diversity and Equal Opportunity Policy outlines “capacity building strategies for Aboriginal peoples” (RtCSR, p. 4) with four initiatives noted. These commitments look positive, and align with measures that have proved effective elsewhere in expanding Indigenous opportunities. However, the policy provided (Appendix A of the SIA which is itself Appendix T1 of the EIS) does not mention Indigenous engagement strategies, so this commitment is only likely to be recorded in writing in the agreement with the Gomeroi native title claimants. Since the agreement must be in place before the lease is issued, this uncertainty promises to be resolved in advance of any approved project activity. The agreement’s provisions may be limited to the Gomeroi people and there is insufficient information at present to assess the economic and development opportunities that will flow to the signatories, and other Indigenous people and businesses.

Inclusiveness and diversity also relate to community engagement as discussed in section 3.8.

Comments and recommendations

- 16) The SIMP should include disaggregated data, indicators and targets (e.g. for female or Indigenous employment) and some measures to protect the flow of benefits over time and the distribution of impacts among different segments of the population.
- 17) The SIMP should also indicate how the social groups least likely to benefit can achieve the “net positive economic impact” that the proponent aspires to, and should track performance in that respect.
- 18) If the agreement with the Gomeroi native title claimants and the intended Aboriginal engagement strategy (commitment 17.2) provide only for Gomeroi people, consideration should be given to engagement of other Aboriginal people and businesses (regional residents and otherwise).
- 19) Given differences in relative power, resources and capabilities amongst different segments of the population, the proponent and the NSW Government should consider means to strengthen institutional and human capacity within affected communities.

3.7 Conflict and community cohesion

The proponent asserts a commitment to maintaining good relationships between company and community and proposes a number of mechanisms, including the Community Consultative Committee (CCC) and the Agreed Principles of Land Access, for achieving this. The SIA briefly mentions, but does not elaborate on, the potential or actual social conflicts and divisions that the project may generate or exacerbate within the community. Indeed, the proponent originally suggested any disruption from protest activity was “out of scope” of the EIS (p. 9-25).

Various stakeholders have different perceptions, objectives and values. There is limited consideration of the different positions, perspectives, views and/or aspirations of different groups within the NGP SIA. Issues between competing interest groups, power differentials, existing or emerging alliances, social divisions or conflicts within or among social groups, are

barely referred to (Appendix D, p. v provides brief acknowledgement of divisions). As well, some common catalysts for local discontent, notably contractor behaviour, are overlooked in the SIA and RtS. The RtS reiterates community engagement activities and notes that the GISERA research indicates a minority (30%) of locals would not accept natural gas development. It further suggests that resolution of community conflict and contribution to community cohesion can be achieved through the project CCC and a grievance mechanism (also referred to as a “complaints management procedure” or “complaints and dispute resolution process” – Commitments 1.3 and 17.3). Both of these are welcome and important measures (Prenzel & Vanclay 2014). However, with a sizable and vocal opposition, they may not suffice. Media coverage (Miskelly & Daniel 2017; SBS Insight 2018), submissions to the EIS, social science reports (Askland et al. 2016; Walton et al. 2017) and the NSW Chief Scientist’s Report (2014) all confirm an intensity of feeling towards the project. Hence, some proactive measures to avoid project-related conflict and heal project-related rifts within the community, and between segments of the community and the company, are warranted.

There is an extensive literature on fostering positive social capital and indicators of community cohesion (see for example Holdsworth & Hartman 2009). Meaningful opportunities for constructive dialogue and transparent information sharing are prerequisites for minimising the loss of social cohesion and community divisions that often accompany resources development. The proponent and government could support regular studies of community perceptions, and expectations like the GISERA studies (Walton et al. 2017, Walton & McCrea 2017) to monitor these matters and provide early warning of issues arising.

Comments and recommendations

- 20) The SIMP should include proactive strategies to anticipate, detect and avoid conflict and build community cohesion as well as means to monitor ongoing tension and levels of tension and conflict within the community (recognising that a well-designed grievance management system will address tensions between community and company, but not within the community).
- 21) The proponent could advocate that a selection criterion for GCBF projects is that they foster community cohesion (in addition to the community events mentioned in Appendix T1 Section 7.8).

3.8 Ongoing community engagement

The NGP EIS Chapter 9 (Community and stakeholder consultation) identifies and provides details about a range of consultation activities undertaken with various stakeholder groups as part of the social baseline for the project. The full stakeholder and community consultation report is included in Appendix D of the EIS and Appendix T1 provides a list of stakeholders consulted (at Section 2.6). The aim of these consultations is described as being

“[to ensure] that wider community awareness and understanding of the project is achieved, and to ensure that the interests of the community are considered during the project development” (EIS Section 9.2.1). Extensive consultation is commendable in light of the importance of positive contact for establishing relationships built on trust (Hewstone & Swart 2011). However, the quality of contact between a company and project-affected people, rather than quantity of contact, is a significant determinant of trust (Moffat & Zhang 2014). The SEARs required the EIS to “... describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.” (SEARs, p. 4). The proponent appears not to have addressed any issues that it deemed were outside the scope of the EIS and to have refuted public submissions that expressed dissatisfaction with SIA consultation (RtS 6-233).

Despite the extensive list of groups and individuals consulted for the EIS, it is not clear that efforts were made to hear from alternative, minority and/or marginalised people, other than local Aboriginal groups as required by cultural heritage and native title legislation. It is important that all project-affected people have an opportunity to meaningfully participate in development decisions. Such inclusion is a foundation principle of SIA and community engagement (AccountAbility 2015; IAIA 2015; IAP2 2014).

For ongoing communication with stakeholders post-approval, the proponent places considerable faith in the CCC as a forum for two-way communication with a range of stakeholder groups. This is an important but not sufficient forum. Other proposals for ongoing engagement with stakeholders include consultations with affected landholders, a “robust Stakeholder Engagement Plan” that has been developed (but is not supplied in the documentation) (RtS 6-234), and commitments to consult a range of designated key stakeholders about relevant plans. The EIS documentation and the RtS do not demonstrate sustained responsiveness by the proponent to community concerns and values expressed during consultations for the EIS, or during the public exhibition period. For instance, EIS Appendix D only provides a high-level snapshot of community perceptions in relation to the project (Section 5.1) and associated details on how “stakeholder feedback has been used to inform the project description, EIS technical studies and environmental and social management plans”.

In some instances, the proponent indicates that responses or changes have been made on the basis of submissions. For example, “spatial information [has been] provided to relevant organisations” (EIS Appendix D, p. 5-4). Some of the supplementary examples provided illustrate modifications to the proponent’s plans in response to stakeholder issues (RtCSR, p. 13-14). The proponent frequently notes the section of the EIS documentation that might provide an answer to the question or respond to concerns. There are also frequent references to compliance with specified regulatory requirements. In some cases, there are general statements that seek to reassure stakeholders, rather than referrals to a source with specific details of interest such as “The flares have been located after considering impacts

on nearby sensitive receptors” (EIS Appendix D, p. 5-2). The response to issues of broad concern (e.g. water impacts, air pollution, impacts on the Pilliga forest etc.) is provided in the general undertaking that “the proponent will continue to discuss and address these matters [concerns raised during EIS consultations] through existing communication channels”.

It is not always clear that the proponent has responded to questions, or concerns raised by stakeholders. One example is discussed for illustrative purposes. Consultations revealed interest in whether the proponent pays to maintain council roads that they use and whether the GCBF will fund roads, bridges and other transport infrastructure (EIS Appendix D, p. 5-21). No changes to the project in this respect are reported. The response and relevant areas of the EIS noted are to the Traffic and transport impacts (Appendix P), the Community Benefit Fund (Appendix T1), and the reporting on community investments that will be part of the annual Sustainability Report. Elsewhere, for forestry roads, funding for wear and tear from project use is noted to be at no expense to the relevant authorities. The response in respect to council roads implies the same, and that any company funding for wear and tear on council roads will be deemed “community investment”.

Documentation of consultation for the EIS may not be a sound basis for judging the responsiveness of ongoing engagement, however similar responses are characteristic of the RtS. Such responses do not provide a sense of confidence about the proponent’s commitment to “open and transparent communication” (EIS Appendix D, p. v) and the development of mutually satisfactory relationships that are reportedly the proponent’s track record (RtCSR, p. 1).

Comments and recommendations

- 22) The proponent’s expressed intention to staff and resource the community engagement/social performance function throughout the project life should include coordination of social commitments and ensuring stakeholders can meaningfully participate throughout construction, operation and decommissioning.
- 23) A commitment by the proponent to contribute to funding, or at least enabling regular, independent social research, would provide knowledge and understanding as a basis for understanding, and potentially establishing positive company-community relations.
- 24) The proposed SIMP should be drawn up in consultation with the community and affected stakeholders, not by the company in isolation.

3.9 Impact monitoring

Section 7 of the NGP EIS Appendix T1 outlines proposed strategies to mitigate potential negative impacts, and strategies to enhance opportunities presented by the project. The proponent proposes measures that it describes as “commensurate with predicted impacts” (RTS, p. 6-242). No information is provided about how these measures and their effect on the identified impacts would be monitored post-approval. A system for monitoring impacts

and issues of concern over the course of the project is integral to adaptive social impact management.

Sections 7.11 and 8.3 of the EIS Appendix T1 demonstrate that the proponent considers the GCBF to be an avenue for mitigating many of the proposed project's potential impacts for which the proponent will not bear direct responsibility. Generally, benefits and impact mitigation are understood separately with the company carrying direct responsibility for the latter. Benefits and "enduring value" can result from judicious community investments by an extractive company during its period of operations (DOIIS 2017). Such investments should be in addition to mitigating negative impacts of company activities. The EIS and associated documents do not distinguish between the proponent's commitment to impact mitigation, community investment, and the GCBF.

Comments and recommendations

- 25) The proponent should commit to using suitable indicators to monitor the accuracy of predictions in the EIS and compliance with undertakings therein. This would enable detection of unpredicted developments and identification of potential impacts, including cumulative impacts.
- 26) The SIMP should include a comprehensive framework for monitoring and reporting social change and social impacts to align with the NSW Chief Scientist and Engineer's (2014) vision for a world-class regulatory regime for CSG extraction. The SIMP would therefore carry the same status as the environmental management and monitoring plan. It should, as indicated in RtCSR (p. 14-15), include indicators, data sources and thresholds as well as specify proposals for monitoring and measuring areas and levels of community concern. The plan should link to the baseline and include provision for a trend analysis over the life of the project. It should detail an agreed response framework and reporting arrangements.
- 27) The baseline for the SIMP, and future monitoring and management plans, should supplement material in the SIA/EIS Appendix T1 with the more recent GISERA data, which used both qualitative and quantitative methods and, crucially, included perceptions data.
- 28) There is value in independent research conducted in parallel to monitoring by a developer. An appreciation of this is evident in the proponent's commitment to facilitating three-yearly comprehensive third-party environmental audits in addition to statutory annual reporting of compliance with licence and lease conditions (RtCSR, p. 16).
- 29) Should the project be approved, the NSW government and the proponent must adopt an adaptive management approach to the issues outlined in this report and work proactively with affected communities with complete transparency, comprehensive monitoring, rigorous compliance, and a commitment to promptly address any emergent problems or unintended consequences and effectively mitigate them.

- 30) With respect to noise and vibration levels, “minor n exceedances” are predicted (Appendix T1 of EIS, p, 56 & RtS, p. 5-80). The proponent proposed to mitigate and manage these exceedances through measures privately negotiated with affected landholders or residents. This management strategy lacks transparency and should be subject to monitoring and reporting. ¹
- 31) Monitoring plans should include disaggregated KPIs for various phases of the project, since characteristics of the impact and acceptability thresholds can vary through the project life-cycle.

3.10 Information transparency

Community acceptance of extractive activities depends on the extent to which individuals perceive the decision making process for a development to be fair, and whether they perceive they have had access to information about the process and the outcomes (IFC 2012). Leading practice SIA involves transparent information sharing, deliberation, and decision-making processes and giving potentially affected stakeholders a level of influence in the process (IAIA 2015). The quality of information shared is also important. The Global Reporting Initiative (GRI) stipulates the characteristics of good information: it should be balanced, comparable, accurate, reliable, timely and clear (GRI 2015). The latter requirement means that technical and legal jargon should be avoided.

In the case of the NGP, the amount and detail of information disclosed at approvals stage is limited given the uncertainties yet to be resolved. The proponent stresses the value it places on being a reliable information source. Providing stakeholders with balanced, objective information is valuable. Based on a description of the process applied for the NGP, this was limited to the “inform” end – or the lower end – of the public participation spectrum (IAP2 2014). It is also important to “hear” stakeholders’ feedback (consult them) and work with them to consider their concerns and aspirations (involve them) and then use this information to effect change.

In various sections of Appendix T1 of the EIS (e.g. section 7.4), the proponent commits to developing a Community Engagement Plan (elsewhere referred to as a Stakeholder Engagement Strategy, and a Community and Stakeholder Management Plan). While the proponent does not provide a description of the strategy, or outline the content of the plan, the proponent does state an intent to continue with the engagement activities undertaken during the EIS, including information provision to interested stakeholders. There is limited mention of mechanisms that would encourage feedback from the community or facilitate participation in the design of monitoring and management plans. The Community Engagement Plan should outline the full range of engagement mechanisms that the proponent will engage over the life of operation.

¹ There is a precedent set in the noise management plan.

If alternatives that people suggest are considered, and if people are involved in decisions about their rights, interests and needs, and how these rights, interests and needs should be addressed, and how they are likely to experience project impacts, they are more likely to feel respected (Zandvliet & Anderson 2009). The proponent's consideration of alternatives seems to have been in terms of whole-project scenarios rather than specific aspects that public consultation suggested might be implemented differently. The proposed landholder agreements and farm management plans (Commitment 8.1 & 17.4) augur well for a different approach that should underpin information sharing and engagement. This is likely to help to resolve uncertainties about processes of information sharing if the project progresses and will reveal the extent to which the processes align with leading practice standards.

As noted in Section 3.9, the SIA provides little detail on the monitoring arrangements for the project. There is a lack of clarity in the EIS Appendix T1 about the governance of proposed mitigation mechanisms, particularly the extent to which the affected community will have an opportunity to provide feedback on the effectiveness of a mechanism as it is implemented.

Some of the information provided gives a sound basis for assessment. For example, with respect to the issue of salt waste, the estimate of a long term average of 47 tonnes per day is supplemented with an estimate of the peak at 115 tonnes in years two to four (NGP EIS, p. ES19). In other instances, there is an inconsistency in how information is presented. For example, in the suite of documents, there is selective use of a life-of-project average or "peak" amounts depending whether the desire is to impress with the potential (of beneficial impacts) or to minimise the potential (for negative impacts). Additionally, the frequent assurances that the project will comply with relevant standards and guidelines are not necessarily meaningful to the general public who may not be familiar with the noise, light and emissions standards or chemicals handling codes specified for this type of project and how those compare with their everyday experience. Including intentions to comply with specific standards (e.g. Commitments 2.1 – 2.6, 6.10, 9.2, & 16.5) does not provide a sense of confidence about others that are not mentioned. The most challenging information gap was discussed at Section 2.3 of this report i.e. there being no requirement for the proponent to provide information about the pipeline as it will be considered as a separate project.

Comments and recommendations

- 32) The Community and Stakeholder Engagement Plan should specify information sharing protocols. These should include stipulating provision of information in a form that is understandable and accessible to a broad audience.
- 33) A public reporting protocol should be a condition of the NGP and require the proponent to disclose information about monitoring arrangements and impacts and key issues (including water impacts, air emissions, project timing, local employment and economic benefits, Aboriginal participation, social impacts including housing affordability and

impacts on the Pilliga Forest – see Appendix D, p. v). This could be achieved through public reporting of monitoring included in the SIMP.

- 34) The proposed management and monitoring plans should be developed in consultation with informed local stakeholders. The consultation should be a broader process than though regular CCC meetings, and integrated into the proposed Community Engagement Plan.

4. Summary of recommendations

This review has considered the information from the designated sources and noted current understandings of the social impacts of CSG development and their management. It concludes that the social impacts and risks posed by the NGP can in general be adaptively managed if leading practice measures are adopted. Therefore, should the project be approved, conditions are warranted to ensure the NGP operates inclusive of all stakeholders, and that the proponent is responsive to concerns that are material to the community. The recommended measures are not discrete, but are interrelated. They are repeated below, grouped according to theme, and represent key opportunities to support social performance.²

Social impact management plan (SIMP)

The proponent, in responding to submissions, added a commitment to prepare and implement a SIMP (commitment 17.8). The following recommendations seek to optimise this significant avenue for ensuring that negative social impacts of the NGP are mitigated and opportunities are enhanced.

The proposed SIMP should be drawn up in consultation with the community and affected stakeholders, not by the company in isolation. **(R24)**

The SIMP should include a comprehensive framework for monitoring and reporting social change and social impacts to align with the NSW Chief Scientist and Engineer's (2014) vision for a world-class regulatory regime for CSG extraction. The SIMP would therefore carry the same status as the environmental management and monitoring plan. It should, as indicated in RtCSR (p. 14-15) include indicators, data sources and thresholds as well as specify proposals for monitoring and measuring areas and levels of community concern. The plan should link to the baseline and include provision for a trend analysis over the life of the project. It should detail an agreed response framework and reporting arrangements. **(R26)**

For the SIMP, the housing baseline should be supplemented with categories of housing available so the potential impact on various population segments can be more realistically assessed and tracked over time. **(R9)**

² The numbers listed in this section reference the recommendation number provided earlier in the report.

The baseline for the SIMP, and future monitoring and management plans, should supplement material in the SIA/EIS Appendix T1 with the more recent GISERA data, which used both qualitative and quantitative methods and, crucially, included perceptions data. **(R27)**

The SIMP and the procurement and logistics strategy (commitment 18.1) should include proactive measures to enhance local economic development in line with local and regional aspirations by partnerships with local councils, Chambers of Commerce etc. This could be added to the responsibilities of the locally employed procurement and contracts officer (see Section 7.2 of Appendix T1). **(R1)**

The SIMP should include monitoring of whether non-resident workers address their regular health needs in their place of permanent residence or place added demands on local services. **(R11)**

The SIMP should specify engagement with service providers to assess and monitor the impact of non-resident workers on medical, health and well-being services and establish KPIs and thresholds/trigger points for response. In resource regions such collaboration and monitoring is critical to improving planning at both the local and state level to support regional health delivery. **(R13)**

The SIMP should include disaggregated data, indicators and targets (e.g. for female or Indigenous employment) and some measures to protect the flow of benefits over time and the distribution of impacts among different segments of the population. **(R16)**

The SIMP should also indicate how the social groups least likely to benefit can achieve the “net positive economic impact” that the proponent aspires to, and should track performance in that respect. **(R17)**

The SIMP should include proactive strategies to anticipate, detect and avoid conflict and build community cohesion as well as means to monitor ongoing tension and levels of tension and conflict within the community (recognising that a well-designed grievance management system will address tensions between community and company, but not within the community). **(R18)**

Social impact monitoring

The proponent’s EIS undertakes to implement an integrated monitoring and management plan, which would represent sound adaptive management practice.

Social impacts would be monitored throughout the construction and operation of the project. The mitigation and management measures described above and summarised in Table 26-8 would be implemented adaptively to changing conditions or emergent social impacts. (EIS, p. 26-33)

The following recommendations aim to improve the transparency and effectiveness of monitoring systems established.

Should the project be approved, the NSW government and the proponent must adopt an adaptive management approach to the issues outlined in this report and work proactively with affected communities with complete transparency, comprehensive monitoring, rigorous compliance, and a commitment to promptly address any emergent problems or unintended consequences and effectively mitigate them. **(R29)**

The proposed management and monitoring plans should be developed in consultation with informed local stakeholders. The consultation should be a broader process than though regular CCC meetings, and integrated into the proposed Community Engagement Plan. **(R34)**

The proponent should commit to using suitable indicators to monitor the accuracy of predictions in the EIS and compliance with undertakings therein. This would enable detection of unpredicted developments and identification of potential impacts, including cumulative impacts. **(R25)**

Monitoring plans should include disaggregated KPIs for various phases of the project, since characteristics of the impact and acceptability thresholds can vary through the project life-cycle. **(R31)**

Proposals to monitor impacts on other industries should include indicators of cumulative impacts on resources of common interest (e.g. water, land, air, labour) and should monitor potential 'spill over' impacts on neighbouring properties, not only host properties. **(R7)**

Monitoring of housing impacts should focus on changes in the receiving environment and impacts for different segments of the population. This will require the monitoring of more than just the effect of NGP direct employees. Responsibility for monitoring should be a shared responsibility between the proponent and the NSW Government. Participation of local housing agencies such as Aboriginal housing associations will assist in monitoring impacts on vulnerable sections of the population. **(R10)**

Baseline and monitoring indicators should be supplemented to identify and track groups who are most at risk of adverse mental health consequences. Landholders are legitimately identified but others may be at risk as well. **(R14)**

The proponent and state should collaborate to monitor demands on identified mental health and well-being support services and cooperate with service providers bearing extra case-loads to devise measures to support the mental health and well-being of various parties so there is not exclusive reliance on available support services. **(R15)**

With respect to noise and vibration levels, "minor exceedances" are predicted (Appendix T1 of EIS, p, 56 & RtS, p. 5-80). The proponent proposes to mitigate and manage these exceedances through measures privately negotiated with affected landholders or residents. This management strategy lacks transparency and should be subject to monitoring and reporting. **(R30)**

A public reporting protocol should be a condition of the NGP and require the proponent to disclose information on monitoring arrangements and on impacts and key issues of topical interest (including water impacts, air emissions, project timing, local employment and economic benefits, Aboriginal participation, social impacts including housing affordability and impacts on the Pilliga Forest – see Appendix D, p. v). This could be achieved through public reporting of monitoring included in the SIMP. **(R33)**

There is value in independent research conducted in parallel to monitoring by a developer. An appreciation of this is evident in the proponent’s commitment to facilitating three-yearly comprehensive third-party environmental audits in addition to statutory annual reporting of compliance with licence and lease conditions) (RtCSR, p. 16). **(R28)**

Gas Community Benefit Fund (GCBF)

The proponent has committed to contribute to a GCBF (commitments 17.6 and 18.2). This fund, “is expected to provide intergenerational, sustainable and lasting benefits to the local community” (RtS, p. 6-234). The following recommendations aim to strengthen the potential of the fund to fulfil this aspiration. Though the proponent does not control the fund, it is in a position to influence for instance by proposing selection criteria for projects to be supported.

Conditions could require the proponent to work with the NSW Government to support workshops, forums and information sessions about the GCBF to develop capacity of potential applicants in grant-writing, needs analysis, program evaluation and other relevant skills. **(R6)**

Government should negotiate with the proponent about establishing a ‘seed’ fund so some resources are available for mitigating and managing construction phase impacts before the GCBF has resources. There should also be discussions about potential for the fund to become self-supporting beyond the flow of royalties from the NGP. **(R7)**

The Gas Community Benefit Fund (GCBF) would benefit from consideration of strategic investments to build the diversity and resilience of regional economies since resource projects inevitably have a finite life. This could be proposed as a selection criterion of GCBF projects. **(R4)**

The proponent could advocate that a selection criterion for GCBF projects is that they foster community cohesion (in addition to the community events mentioned in Appendix T1 Section 7.8). **(R21)**

Other

Some of the proponent's undertakings, commitments and proposed initiatives did not specify the value added by such measures. The recommendations that follow seek to refine those initiatives to remove uncertainty, and optimise outcomes.

Future plans and reporting should distinguish between impact mitigation, benefits streams and community investment, and provide details of associated consultation, partnerships and cooperation. **(R8)**

The Community Engagement Plan should specify information sharing protocols. These should stipulate provision of information in a form that is understandable and accessible to a broad audience. **(R32)**

The proponent's occupational health and safety measures will need to comprehensively attend to the health and well-being of its workers and contractors' workers while on site. **(R12)**

If the negotiated agreement with the Gomeroi native title claimants and the intended Aboriginal engagement strategy (commitment 17.2) provide only for Gomeroi people consideration should be given to engagement of other Aboriginal people and businesses (regional residents and otherwise). **(R18)**

Given differences in relative power, resources and capabilities amongst different segments of the population, the proponent and the NSW Government should consider means to strengthen institutional and human capacity within affected communities. **(R20)**

The proponent's expressed intention to staff and resource the community engagement/social performance function throughout the project life should include coordination of social commitments and ensuring stakeholders can meaningfully participate throughout construction, operation and decommissioning. **(R22)**

A commitment by the proponent to contribute to funding, or at least enabling regular, independent social research, would provide knowledge and understanding as a basis for understanding, and potentially establishing positive company-community relations. **(R23)**

The proponent should consult and negotiate with local economic development agents and other sectors to mitigate the effect of the competition over skilled labour that is predicted during the three years of project construction. This would facilitate joint strategies about suitable forms of advance notice of labour, skills and supply needs to both 'alert' local businesses to potential opportunities and 'warn' them of potential threats to their own inputs. **(R2)**

Commitment 17.2 to an Aboriginal Engagement Strategy, to maximise Aboriginal economic participation in project-related employment and contracts is welcome. The related capacity building strategies and employment, training and procurement initiatives outlined in Appendix A of the SIA should include KPIs and monitoring plans. This will also be relevant to any commitments to employment, training and business development in the agreement with the Gomeri native title claimants. The commitment implies a supplement to the Diversity and Equal Opportunity policy (Appendix A of Appendix T1), which does not specify any capacity building strategies as part of employment, training and procurement initiatives targeted at Indigenous peoples. (R3)

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Appendix 1

Document match of social impact issues raised or addressed by various parties

Note: Given the different approaches to classification, it is not always possible to indicate a dedicated section of a document dealing with an issue. Where possible, the main section where it is covered is indicated. A common topic does not imply common approaches to the topic. Very general mentions of matters without specifics (such as frequent mentions of monitoring in EIS Appendix T1) are not credited below.

Impact areas	EIS (Chapter/ section)	Appendix T1 - SIA (Section/s)	CSR (Section)	Public submissions	Response to submissions (Start page)
Sundry areas					
Community and stakeholder consultation	Ch 9	7.4	✓ (2.8)	✓	6-52
Assessment of alternatives/ scenarios	Ch 8	-		✓	6-49
Approach to impact assessment ¹	Ch 10	2	✓	✓	6-59
Property and land use	Ch 17	6.2		✓	6-156
Traffic and transport	Ch 22 ²	6.2, 6.3		✓	6-205
Historic heritage	Ch 21 ²	-		✓	6-203
Landscape and visual	Ch 23 ²	-		✓	6-209
Project commitments	Ch 31	-	✓ (2.10)	✓	6-278
Social Note that 80% of form submissions + 26.6% of unique submissions addressed social & health impacts.					
Unequal distribution of impacts & benefits		8.1	✓(2.3, 2.6)	✓	6-236
Costs of living and of business ²	-	-		✓	6-237
Labour Dynamics	26.3.1 ²	6.2, 7.2	✓	✓	6-238
Neighbouring local government areas	26.2	6.3, 7.2	✓ (2.1)	✓	6-238
Housing and accommodation	26.3.3	4.4, 6.3, 7.7	✓ (2.3)		
Community Conflict and Cohesion	-	6.3	✓ (2.7)	✓	6-239
Population growth	26.2	6.3	✓	✓	6-240
Tourism and recreation	-	6.3	-	✓	6-240
FIFO workforce	26.3.2	5	✓	✓	6-241
Cumulative social impacts	-	6.3	✓	✓	6-241
Mitigation and Management of impacts	26.4	8.3	✓	✓	6-242
Monitoring		-	✓ (2.9)	✓	6-242
Governance of GCBF	-	6.3, 7.8	✓ (2.2)	✓	6-242
Aboriginal employment and businesses		7.3	✓ (2.1)	✓	6-243
Health impacts²					
Likelihood of leaks and spills ²			-	✓	6-244
Risk of air emissions			-	✓	6-245
General health, well-being and services	26.3.6		✓(2.4, 2.5)	✓	6-245, 5-145
Chemicals of concern	25 + A-T3		-	✓	6-248
Fugitive emissions			-	✓	6-251
Endocrine disruptors			-	✓	6-252
Economic impacts² 16,870 submissions (73.3%) – 527 being unique submissions (8.3%)					
Cost benefit analysis (multiple aspects)	A-U1		-	✓	6-254
Regional economic assessment	A-U2		✓(2.1)	✓	6-260
Investment risk	A-U2		-	✓	6-264

¹ Various issues related the SIA methodology were canvassed in these documents including the currency of information for the SIA baseline, the consideration of intangible social values, and the social impacts of closure.

² Many other NGP EIS technical studies are relevant e.g.: Agricultural Impact Statement (EIS Appendix K), Landscape and Visual Impact Assessment (EIS Appendix Q), Noise and Vibration Impact Assessment (EIS Appendix M), Air Quality Impact Assessment (EIS Appendix L), Economic Impact Report (EIS Appendices U1, U2), Traffic and Transport Impact Assessment (EIS Appendix P), Aboriginal Cultural Heritage Assessment (EIS Appendix N1), Hazard and Risk Assessment (EIS Appendix X), Health Impact Assessment (EIS Appendix T2), Chemical Risk Assessment (EIS Appendix T3), and Historic Heritage Impact Assessment (EIS Appendix O).